ABSTRACT OF THE DISCLOSURE

A system comprising an electromyogram (EMG) system operative to sense electromyographic activity generated in a muscle, at least one position sensor, and a processor in communication with the EMG system and the at least one position sensor, the processor operative to process data of the EMG system and three-dimensional position and orientation information from the at least one position sensor to provide an output that comprises electromyographic activity data as a function of the three-dimensional position and orientation of the at least one position sensor.